

## **NICE testimony: Workplace practices to improve health**

**Worker health is a business opportunity that needs managing like any other issue.**

### **1. What is good work?**

#### **a. Management style – not that simple?**

The Scope refers to “promoting the wellbeing of employees through proactive and supportive leadership style” but it’s not that simple. There are, for example, many situations where an authoritarian leadership style might be appropriate.

#### **b. Job security – not a big issue?**

The Scope refers to Marmot’s commentary on ‘precarious jobs’ and the “ample evidence on the adverse effects on health and wellbeing produced by” them. However, this illustrates the problem of relying on prominent reviews rather than the evidence. Marmot refers to and relies on Benach and Muntaner (2007) who actually wrote “Current conceptual and empirical scholarship on precarious employment and health is still limited.” and “the study of precarious employment and health is still in its infancy”. The evidence is not ample, rather there is evidence that precarious jobs are not so important. The Good Work Commission (2011) noted that “almost everyone understands that guarantees of job security are unrealistic – and therefore not credible” and reported data from the British Social Attitudes Survey 2008 showing that only half of workers consider job security is a “very important” attribute of a job.

The reliance on reviews is commonplace in workplace health and a potential source of significant error. For example, in a commentary on a report from Kim Burton’s team I showed that their reliance on one of their own previous reviews of yet another review had resulted in the very cautious conclusions of the original research becoming a far less equivocal endorsement of cognitive-behavioural approaches for musculoskeletal issues (Preece 2009a).

#### **c. Presenteeism – not that bad?**

A lack of clarity about the definition of presenteeism has resulted in the assumption that this is a bad thing. This assumption should be challenged – at its simplest level doing any work means a worker is more productive than one doing none. The Scope suggests presenteeism is the phenomenon of “people attending work while they are sick” and suggests this may have long term adverse effects. Recent editorials in both the British Medical Journal (Dew 2010) and Occupational Medicine (Roeleen and Groothof 2011) have both addressed the adverse impact of presenteeism – in both cases I was able to show that the conclusions were based on unsubstantiable conclusions and small studies (Preece 2010a, Preece 2011a). Presenteeism is an important concept but as I wrote in the BMJ “Only limited evidence suggests that presenteeism leads to significant morbidity (especially when health issues at work are effectively managed). Workers have health issues. Employers need to take action and provide suitable occupational health support.”

## **2. Measuring the opportunity**

### **a. Productivity**

There have been numerous studies in the USA suggesting both productivity is reduced by the presence of general health risks (eg Burton et al 1999) and intervention can improve productivity (Burton et al 2006) and health (Loeppke et al 2011 and 2013). There is almost no similar research in the UK where the health support from employers and state are very different. There is considerable cause to believe these studies (a) may not be widely generalisable to different employers (Preece 2009b) and (b) may overstate the benefit (Preece 2012 and 2013).

A rare example of a UK study was reported from Merthyr Tydfil (Wynne-Jones et al 2009). This was an ambitious project. Whilst the research team showed that “health variables accounted for the largest proportion of explained variance in both absence and performance” in reality almost all of the variance in absence (96%), for example, was not explained by health (Preece 2010b).

### **b. Outcomes**

- i. Some outcomes are assumed to be good** – It is important that an outcome should not be assumed to be universally good. It has been suggested that flexible working is beneficial (see Foresight Project) but the negative consequences are not always made clear: Flexibility for one person may not be so desirable for their colleagues (eg Kelliher and Anderson 2008). Choosing to leave employment by choice may have long term adverse impact: Early retirement is an important risk factor for cognitive loss/dementia (Dufouil C et al 2014, Lupton et al 2010, Roberts et al 2011)
- ii. Some work outcomes are forgotten** – The commonest cause of death related to work is due to road traffic accidents (Clarke et al 2005).
- iii. Some outcomes are poorly defined** – ‘Stress’ is widely accepted as a major issue, yet it is poorly defined. ‘Stress’ as it is reported in the NHS staff survey explains just about all the ‘stress’ in the UK as it is reported by the Labour Force Survey (Preece 2011b).
- iv. Changing the work outcome may change the conclusion** – In the clinical guideline for back pain early physical therapy is not supported by the evidence. In the workplace guidance on reducing sickness absence early physical therapy is supported by the evidence.
- v. Some work impacts are not addressed in clinical guidance** – There are good quantitative and qualitative data on employment of cancer patients (eg Taksila-Brandt et al 2004, Wells et al 2013). However, there is little guidance on how clinicians and managers can collaborate to protect employment.

## **3. Steps in managing health risk**

- a. identifying potential risks and hazards
- b. identifying vulnerability
- c. creating enabling environments

## **4. Investing in the opportunity – some issues**

### **a. Occupational health services**

Models were reviewed by Kirk (2009). Evidence is scarce. A review of the international literature identified only one report comparing outcomes from different models: That was

from a tri-ennial survey of OH services in Finland. The report showed more employees were supported per physician and per nurse in large multidisciplinary centres .

In a recent study for NHS North West Ford, Kirk and Denman (2010) surveyed all Trusts and NHS OH providers in the region and interviewed all the Heads of OH units. The data were analysed together with information on CQC ratings, sickness absence rates, and the NHS staff survey.

Larger OH provider units, supporting multiple Trusts, were significantly more likely to:

- Comply with service accreditation standards
- Employ specialist occupational health clinical staff
- Provide access to physical therapy and counselling
- Make more use of information technology

Ford, Kirk and Denman provider organisation should be large enough to offer access to OH specialist medical and nursing staff and support for clinical training and continuing professional development.

#### **b. Immunisation**

Who should provide this for (examples):

- TB in abattoir workers
- Hepatitis B in morticians
- Influenza in home care workers

#### **c. Incident response**

Preventing morbidity also involves properly preparing for serious incidents at work. This is not limited to events such as fire and accidental injuries. About 5% of strokes occur in the workplace (Frederic et al 2014).

#### **d. Prioritising**

Manual handling training is mandated by regulations but is 'largely ineffective' (Clemes et al 2010). Resources are scarce: It is difficult for employers to invest prudently in the health of the workforce when ineffective measures are mandated by legislation.

### **5. General lessons from specific studies**

There are potentially generalisable conclusions from single issue studies with a specific focus. For example, Fisher et al (1998) described the success of systematic measures to reduce allergy to laboratory animal allergen in biomedical research. These steps were associated with no new cases of allergy in three consecutive years. The measures included education and training; modification of work practices; engineering controls; the provision and use of personal protective equipment; and, health surveillance. All of these measures might be considered elements of good management practice that are more widely applicable and might result in a broader range of health outcomes in other contexts.

### **6. OH study pitfalls**

#### **a. Lack of critique / peer review**

See commentary on Loeppke et al, Roelen and Groothof, and Dew above

#### **b. Credible expertise**

See commentary on Burton et al and Marmot Review above

**c. Hard to study most illnesses**

See commentary on most common cause of work-related fatalities (RTA) above.

**d. Lack of intervention studies**

See NICE guidance on Mental Wellbeing

**e. Dealing with the difficult stuff**

See Preece et al (2012) on implementation of NICE workplace guidance – few attempts to address obesity.

**f. Over-generalisation**

See commentary on Dew above

**g. Size of effect v statistical significance**

See commentary on Wynne-Jones et al above

## **References**

Benach J and Muntaner C (2007) Precarious employment and health: Developing a research agenda. *Journal of Epidemiology and Community Health* 61: 276-277.

Burton WN, Conti DJ, Chen CY, Schultz AB, Edington D. (1999) The Role of Health Risk Factors and Disease on Worker Productivity. *J Occup Environ Med.* 41(10), 863-877

Burton WN, Chen CY, Conti DJ. The Association Between Health Risk Change and Presenteeism Change *J Occup Environ Med.* 2006 48:3, 252-263

Clarke DD, Ward P, Bartle C and Truman W. (2005) An In-depth Study of Work-related Road Traffic Accidents. Department for Transport: London

Clemes SA, Haslam CO Haslam RA (2010) What constitutes effective manual handling training? A systematic review. *Occup Med* 60 (2): 101-107.

Dew K. (2011) Pressure to work through periods of short term sickness. *BMJ* 341:d3446.

Dufouil C, Pereira E, Chêne G, Glymour MM, Alépovitch A, Saubusse E, Risse-Fleury M, Heuls B, Salord JC, Brieu MA, Forette F. (2014) Older age at retirement is associated with decreased risk of dementia. *Eur J Epidemiol.* (epub advance access)

Fisher R, Saunders WB, Murray SJ, Stave G. (1998) Prevention of Laboratory Animal Allergy *J Occup Environ Med.* 40(7), 609-613

Ford F Kirk H Denman D (2010) Review of occupational health and related services for the NHS workforce in the North West. UCLan: Preston

[https://www.ewin.nhs.uk/storage/northwest/files/Review\\_of\\_NHS\\_NW\\_brief\\_version.pdf](https://www.ewin.nhs.uk/storage/northwest/files/Review_of_NHS_NW_brief_version.pdf)

Kelliher C and Anderson D (2008) Flexible working and performance. *Working families:* London

Frederic M, Ozguler A, Baer M, Loeb T, Descatha, A (2014) Is the Workplace a Safer Place to Have a Stroke? *J Occup Environ Med.* 56(2), 127–128

Kirk H (2010) The Future Configuration of NHS Occupational Health Services. NHS Plus: Bristol.

[http://www.nhshealthatwork.co.uk/images/library/files/Leading%20OH%20service/The\\_Future\\_Configuration\\_of\\_NHS\\_Occupational\\_Health\\_Services\\_2010\\_report.pdf](http://www.nhshealthatwork.co.uk/images/library/files/Leading%20OH%20service/The_Future_Configuration_of_NHS_Occupational_Health_Services_2010_report.pdf)

Loeppke R, Edington D, Bender J, Reynolds A. (2013) The association of technology in a workplace wellness program with health risk factor reduction. *J Occup Environ Med.* 55:259–264.

Loeppke R, Edington DW, Bég S, Bender J. (2011) Two-year outcomes show effectiveness of the prevention program in lowering health risks and costs [Letter to the Editor]. *Popul Health Manage.* 14:265.

Lupton MK, Stahl D, Archer N, Foy C, Poppe M, Lovestone S, Hollingworth P, Williams J, Owen MJ, Dowzell K, Abraham R, Sims R, Brayne C, Rubinsztein D, Gill M, Lawlor B,

Dr Richard Preece FRCP FFOM FACOEM

Lynch A, Powell JF. (2010) Education, occupation and retirement age effects on the age of onset of Alzheimer's disease. *Int J Geriatr Psychiatry*. 25(1):30-6.

Preece R. (2009a) Pitfalls of reviewing reviews. *Occup Med* 59(3):204

Preece R. (2009b) Is health and productivity an issue for all employers? *J Occup Environ Med*. 51(9):989

Preece R. (2010a) Effective absence management. *Occup Med* 60(7):575;

Preece R. (2010b) (Lack of) Impacts on work absence and performance. *Occup Med* 60(1):81

Preece R (2011a) Pressure to work during short periods of sickness should be seen in perspective. 343:d5237

Preece R. (2011b) Work-related stress: case definitions, prevalence and the NHS national surveys. *Occup Med* 61(2):136

Preece R. (2012) Assessing the benefit of a health prevention tool [Letter to the Editor]. *Popul Health Manage*. 15:188.

Preece R, Williams S, Jones S, Peel P, Roughton M. (2012) Measuring implementation of evidence-based guidance on promoting workers' health. *Occup Med* 62(8):627-31.

Preece R (2013) Does health risk reduction technology really work? *J Occup Environ Med*. 55(6):604.

Roberts BA, Fuhrer R, Marmot M, Richards M. (2011) Does retirement influence cognitive performance? The Whitehall II Study *J Epidemiol Community Health* 2011;65:958-963

Roelen CAM, Groothoff JW (2010) Rigorous management of sickness absence provokes sickness presenteeism. *Occup Med* 60:244-246.

Taskila-Brandt T, Martikainen R, Virtanen SV, Pukkala E, Hietanen P, Lindbohm ML. (2004) The impact of education and occupation on the employment status of cancer survivors. *Eur J Cancer*. 40(16):2488-93

Wells M, Williams B, Firnigl D, Lang H, Coyle J, Kroll T, MacGillivray S. (2013) Supporting 'work-related goals' rather than 'return to work' after cancer? A systematic review and meta-synthesis of 25 qualitative studies. *Psychooncology*. 22(6):1208-19

Wynne-Jones G, Buck R, Varnava A, Phillips C, Main CJ. Impacts on work absence and performance: what really matters? *Occup Med (Lond)* 2009;59:556-562